

traditional video editing process. By using editing software, a user can exactly control a digital video facility, and effectively improve quality and effect of video editing.

[0023] While the invention has been described by way of example and in terms of a preferred embodiment, it is to be understood that the invention is not limited thereto. On the contrary, it is intended to cover various modifications and similar arrangements and procedures, and the scope of the appended claims therefore should be accorded the broadest interpretation so as to encompass all such modifications and similar arrangements and procedures.

WHAT IS CLAIMED IS:

1. A method of digital video capture for capturing video data to a computer system, the method comprising the following steps:

(a) reading the video data;

(b) detecting the video data and determining file size of the video data and scene change; and

(c) splitting and storing the video data into a plurality of video files.

2. The method of digital video capture according to claim 1, wherein the method further comprises setting up a default size of video data before said step (b), estimating the file size of the video data.

3. The method of digital video capture according to claim 1, wherein the video data comprises at least a first scene and a second scene.

4 The method of digital video capture according to claim 3, wherein the first scene and the second scene further comprise a plurality of frames respectively.

5 5. The method of digital video capture according to claim 4, wherein the estimate of scene change in said step (b) further comprises calculating an interval of recording time between a frame and its adjacent frame.

6. The method of digital video capture according to claim 5, wherein the interval between the last frame of the first scene and the first frame of the second scene is greater than the interval between 2 adjacent frames of others.

7. The method of digital video capture according to claim 4, wherein the determination of scene change in said step (b) further comprises distinguishing the difference between object characters of a frame and its adjacent frame.

8. The method of digital video capture according to claim 4, wherein in said step (c), frames of the first scene and frames of the second scene are split into different video files.

9. The method of digital video capture according to claim 8, wherein frames of the first scene are stored in the same video file.

10. The method of digital video capture according to claim 8, wherein

frames of the second scene are stored in the same video file.

11. A method of digital video capture is for capturing video data to computer system, wherein the computer system comprises a storage unit, the method comprising the following steps:

- 5 (a) reading a plurality of frames of the video data;
- (b) estimating the file size of the video data;
- (c) detecting scene change between the frames;
- (d) splitting the video data into a plurality of video files; and
- (e) storing the video files to a storage unit.

10 12. The method of digital video capture according to claim 11, wherein the method further comprises setting up a default value of video data before said step (b).

13. The method of digital video capture according to claim 12, wherein the method continues to proceed said step (c) when the size of the captured video data is greater than the default value; the method goes back to said step (a) when the size of
15 the captured video data is less than the default value.

14. The method of digital video capture according to claim 13, wherein the video data comprises at least a first scene and a second scene.

15. The method of digital video capture according to claim 14, wherein the method further comprises calculating an interval of recording time between a frame and its adjacent frame in said step (c).

16. The method of digital video capture according to claim 15, wherein the interval between the last frame of the first scene and the first frame of the second scene is greater than the interval between 2 adjacent frames of others.

17. The method of digital video capture according to claim 14, wherein the determination of scene change in said step (b) further comprises distinguishing the difference between object characters of a frame and its adjacent frame.

18. The method of digital video capture according to claim 14, wherein in said step (d), frames of the first scene and frames of the second scene are split into different video files.

19. The method of digital video capture according to claim 18, wherein frames of the first scene are stored in the same video file.

20. The method of digital video capture according to claim 18, wherein frames of the second scene are stored in the same video file.

21. A device of digital video capture for capturing video data stored in a tape to a computer system, wherein the computer system comprises a storage unit, the device of digital video capture comprising:

a reading unit for reading video data;

a detection unit for estimating file size and detecting changes of scenes;

a splitting unit for splitting video data into a plurality of video files and storing the video files into the storage unit.

5 22. The device of digital video capture according to claim 21, wherein the video data comprises a plurality of frames.

 23. The device of digital video capture according to claim 22, wherein the reading unit further comprises a memory for storing the frames temporarily.

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